Quarterly Information Disclosure about Distributed Energy Resources

1 October – 31 December 2022

Distributed Energy Resource (DER) Information 1 July – 30 September 2022			
> Number of DER connected to Essential Energy's distribution network	243,133		
> Volume of electricity exported into Essential Energy's distribution network from DER	312 GWh (estimated)		
> Number of complaints from customers without DER affected by voltage issues or exceedance of thermal capacity limits due to DER	0 customers		
> Number of customers that are subject to static limits on the distribution network due to DER	45287		
> Number of DER customers that are actively being curtailed from exporting any electricity via a total static limit	737		
> Number of DER customers that are actively being curtailed from exporting some electricity via a partial static limit	44550		
 Level of operating and capital expenditure by Essential Energy that is primarily for the purpose of addressing network constraints on DER exports (including reasons for expenditure options) 	Information is currently not available		

> Top ten areas by postcode in Essential Energy's distribution district that have the highest levels of DER penetration by reference to volume of electricity exported and number of units and/or systems.

Volume of electricity exported		
Postcode	MWh exported Oct to Dec	
2830	10,577	
2444	10,156	
2800	9,982	
2480	9,462	
2340	9,431	
2650	9,335	
2486	8,630	
2450	8,539	
2795	8,363	
2478	8,219	

Volume of units and/or systems		
Postcode	Number of systems	
2830	7,868	
2480	7,863	
2444	7,030	
2650	6,683	
2486	6,208	
2450	6,153	
2340	5,767	
2478	5,730	
2800	5,635	
2640	5,443	



Distributed Energy Resource (DER) Information 1 July – 30 September 2022

> Number of complaints from DER customers by reference to postcode relating to constraints impacting the export of electricity from DER

	No of Work		Post		
Post Code	Orders		Code	No of Work Orders	
2340	4	4	2681		1
2347	-	1	2705		1
2350	2	2	2711		1
2359	-	1	2720		3
2360	-	1	2735		1
2361	-	1	2792		1
2380	-	1	2793		1
2396	-	1	2795		3
2440	2	2	2797		2
2453	-	1	2798		5
2470	2	2	2799		2
2474	-	1	2800		5
2480	2	2	2804		1
2481	2	2	2808		1
2488	-	1	2810		2
2580	2	2	2821		1
2583	-	1	2824		1
2590	-	1	2827		2
2620	-	1	2828		1
2621	-	1	2830		2
2640	7	7	2834		1
2646	-	1	2850		6
2648	3	3	2869		1
2663	-	1	2877		2
2669	<u>-</u>	1	2878		1
2672	<u>-</u>	1	2880		1
2680	Ţ	5	4383		1
			Total		98

Definitions for Distributed Energy Resources		
Term	Definition	
DER	means distributed energy resources comprising small generating units and generating systems located on the customer's side of the metering installation that export electricity into the licence holder's distribution network. For the purpose of this reporting manual, it excludes electric vehicles and their charging infrastructure.	
Generating system	means a system comprising one or more generating units with a total rating less than 30MW.	
Generating unit	has the same meaning given to that term in the National Electricity Rules.	
Generator	has the same meaning given to that term in the National Electricity Rules.	
Partial static limit	means the imposition of non-zero limits on the capability of the Generator to export to the grid.	
Small generating unit	means a generating unit:	
	(a) with a nameplate rating that is less than 30MW; and	
	(b) which is owned, controlled or operated by a person that AEMO has exempted from the requirement to register as a Generator in respect of that generating unit.	
Thermal capacity limit	means the maximum electrical current that, under ambient conditions, can be carried by the distribution feeder, without exceeding the thermal limits of the feeder.	
Total static limit	means the imposition of blanket limits on the capability of the Generator to export to the grid.	